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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/091,457 | 03/07/2002 | Yoshihiro Ishikawa | 220416US2 | 8789 |

22850 7590 05/18/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
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ALEXANDRIA, VA 22314

EXAMINER

AMINZAY, SHAIMA Q

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2684

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--------------------------|--------------------------------------|--|--|
| Interview Summary | Application No. 10/091,457 | Applicant(s) ISHIKAWA, YOSHIHIRO | |
| | Examiner Shaima Q. Aminzay | Art Unit 2684 | |

All participants (applicant, applicant's representative, PTO personnel):

- (1) Shaima Q. Aminzay. (3) _____
 (2) ZACHARY STERN (Applicant's Representative). (4) _____

Date of Interview: 01 April 2005.

Type: a) ☒ Telephonic b) ☐ Video Conference
 c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
 If Yes, brief description: _____.

Claim(s) discussed: 15.

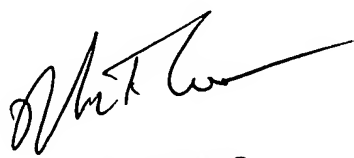
Identification of prior art discussed: N/A.

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

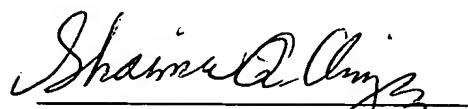
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The applicant's representative pointed the typo in the equation that is listed in page 3 of allowance office action (3/21/05). The letter "Y" replaced with "1" as stated in the equation of claim 15. A complete copy of the corrected allowance office action dated April 4, 2005 needs to be mailed to the applicant's representative.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.


NICK CORSARO
PRIMARY EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


 Examiner's signature, if required

DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 4-5, 8-11, 14-15, 18-20 are allowed.

Reasons for Allowance

2. The following is an examiner's statement of reason for allowance:

The applicant filed amendment on November 4, 2004 in response to office action August 2, 2004, and the amendments to the independent claims 1, 5, 8, 9, 11, 15, 18 and 19 overcome the prior art rejection which puts the application in conditions for allowance.

None of the prior art of the record either singularly or in combination teaches or fairly suggests method and apparatus of the followings:

"required receiving power R in the radio channel is calculated by an equation represented by a required receiving power $R_{sub.0}$ when interference does not exist at all at a receiver, and a ratio P_{total} / P of the total power P_{total} transmitted from the transmitting station and the transmission power P of the predetermined radio channel transmitted from the transmitting station", as disclosed in claims 1, and 11.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (P_{total} / P)))$ herein, Λ is a signal to noise (interference is included) power ratio required at the receiver, and ρg is a spread gain" as disclosed in claims 4, and 14.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (1 / \zeta)))$ herein, R_o is a required receiving power when interference does not exist at all at the receiver, Λ is a signal to noise (interference is included) power ratio required at the receiver, ρg is a spread gain, ζ is a ration of the transmission power of the predetermined radio channel transmitted from the transmitting station to the total transmission power", as disclosed in claims 5.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (1 / \zeta)))$ herein, R_o is a required receiving power when interference does not exist at all at the receiving station, Λ is a signal to noise (interference is included) power ratio required by the receiving station, ρg is a spread gain, P is the transmission power of the predetermined radio channel transmitted from the transmitting station, P_{total} is the total transmission power from the transmitting station, ζ is a ration of the transmission power of the predetermined radio channel transmitted from the transmitting station to the total transmission power", as disclosed in claims 15.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (P_{total} / P)(Y)))$, or $R = R_o (1 / (1 - (\Lambda / \rho g) (Y / \zeta)))$

herein, R_o is a required receiving power when interference does not exist at all at the receiving station, Λ is a signal to noise (interference is included) power ratio required by the receiving station, ρg is a spread gain, P is the transmission power of the predetermined radio channel transmitted from the transmitting station, P_{total} is the total transmission power from the transmitting station, ζ is a ration of the transmission power of the predetermined radio channel transmitted from the transmitting station to the total transmission power, and Y is a coefficient multiplied to interference from the transmitting station in communication with the receiving station.", as disclosed in claims 8, and 18.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (P_{total} / P) (1+F)))$, or $R = R_o (1 / (1 - (\Lambda / \rho g) ((1+F) / \zeta)))$ herein, R_o is a required receiving power when interference does not exist at all at the receiving station, Λ is a signal to noise (interference is included) power ratio required by the receiving station, ρg is a spread gain, P is the transmission power of the predetermined radio channel transmitted from the transmitting station, P_{total} is the total transmission power from the transmitting station, Y is a coefficient multiplied to interference from the transmitting station in communication with the receiving station, and F is a power ratio of a total interference from transmitting stations other than the transmitting station in communication with the receiving station, and an interference from the transmitting station in communication with the receiving station ", as disclosed in claims 9, and 19.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (P_{total} / P) (Y+F)))$, or $R = R_o (1 / (1 - (\Lambda / \rho g) ((Y+F) / \zeta)))$ herein, R_o is a required receiving power when interference does not exist at all at the receiving station, Λ is a signal to noise (interference is included) power ratio required by the receiving station, ρg is a spread gain, P is the transmission power of the predetermined radio channel transmitted from the transmitting station, P_{total} is the total transmission power from the transmitting station, ζ is a ration of the transmission power of the predetermined radio channel transmitted from the transmitting station to the total transmission power, and F is a power ratio of a total interference from transmitting stations other than the transmitting station in communication with the receiving station, and an interference from the transmitting station in communication with the receiving station", as disclosed in claims 10, and 20.

Cited reference Ozluturk (Ozluturk U. S. Patent 5842114) in view of Mimura (Mimura U. S. Patent 6393005) teaches a method and an apparatus of a "wireless communication system which dynamically adjusts the power of signals transmitted over global channels from a base station to minimize power spillover to adjacent communication cells" (Ozluturk, column 1, lines 8-14), and "the system monitors the total transmit power of the base station and dynamically adjusts the global channel transmit power as a function of the total transmit

power of the base station as measured at the base station" (Ozluturk, column 1, lines 23-27), and to provide a "method and device for controlling the transmitting power of a base station in a CDMA cellular system that can reduce degradation in forward speech quality in cases in which the total base station transmitting power increases and the base station is unable to transmit the power desired by mobile stations" (Mimura, column 1, lines 10-14)

However, the cited reference Ozluturk in view of Mimura do not expressly teach **"required receiving power R in the radio channel is calculated by an equation represented by a required receiving power $R_{sub.0}$ when interference does not exist at all at a receiver, and a ratio P_{total} / P of the total power P_{total} transmitted from the transmitting station and the transmission power P of the predetermined radio channel transmitted from the transmitting station"**

For these reasons, independent claims 1, 5, 8, 9, 11, 15, 18, and 19 are allowed. Claims 4, 10, 14, and 20 are depend on the independent claims 1, 8, 11, and 18 are allowed under the same reasons set forth in claims 1, 8, 11, and 18.

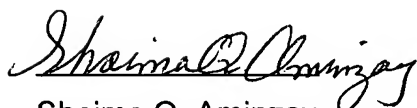
3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submissions should be clearly labeled
"Comments on Statement of Reasons for Allowance."

Art Unit: 2684

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 703-305-8723. The examiner can normally be reached on 7:00 AM -5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745, the primary examiner, Nick Corsaro can be reached on 703-306-5616, the primary examiner, Nick Corsaro can be reached on 703-306-5616. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shaima Q. Aminzay

(Examiner)

April 4, 2005

**NICK CORSARO
PRIMARY EXAMINER**

Nick Corsaro

(Primary Examiner)

Art Unit 2684